

Claims

1. Mould assembly including a first mould part (2) and a second mould part (4) for moulding a substantially elongated, closed profile member, in particular a wind turbine blade of fibre-reinforced polymer, said mould assembly further including:
- 5 a hinge mechanism (6) with a hinge line (7) extending parallel to the two mould parts in the longitudinal direction of the mould to allow turning of the mould parts in relation to each other between a first, open position, in which the opening of one or preferably both mould parts faces upwards, and a second, partially closed position, in which the second mould part (4) is rotated about the hinge line (7) such that its opening faces downwards towards the opening of the first mould part (2), the mould assembly further being provided with
- 10 displacement means for a rectilinear translational movement of the second mould part (4) between the second, partially closed position of the mould and a third position, in which the two mould parts (2, 4) meet so that their inner faces substantially define the shape of the finished profile member
- 15 characterised in that the displacement means are formed of protractile guide rods (8) mounted on one (2) of the two mould parts along the two longitudinal sides thereof extending substantially parallel to the hinge line (7), and associated bearing means (10) on the longitudinal sides of the other mould part (4) for receiving the free ends (9) of the guide rods (8) such that the second mould part (4) may rest on the guide rods in the second position of the mould, the guide rods (8) including drive means (12) for displacing the guide rods (8) and thus moving the two mould parts (2, 4) between the second and third positions of the mould.
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2. Mould assembly according to claim 1, wherein the guide rods (8) are provided with individually controllable drive means (12).
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3. Mould assembly according to claim 1 or 2, wherein the free ends (9) of the guide rods (8) and optionally also the bearings (10) are conical.
4. Mould assembly according to one of the preceding claims, wherein the second
5 mould part (4) is releasably attached to the hinge mechanism (6).
5. Mould assembly according to one of the preceding claims, wherein both mould parts (2, 4) are provided with flanges (15, 16) along their longitudinal sides, said flanges having a plurality of pilot holes (20), whose axes are parallel to the axes of
10 the guide rods (8), each pilot hole (20) in the flanges (16) of the first mould part (2) being arranged opposite a pilot hole in the flanges (15) of the second mould part (4).
6. Mould assembly according to claim 5 including guide pins (13) having two conical ends (18) adapted to engage two pilot holes (20) arranged opposite one
15 another in the flanges (15, 16) of the first mould part (2) and the second mould part (4).
7. Mould assembly according to claim 5 or 6, wherein the pilot holes (20) are provided in apertured members (14, 17), which are adjustably mounted on the
20 flanges (15, 16) so as to enable displaceable adjustment thereof in the plane extending perpendicular to the axes of the pilot holes (20).
8. Mould assembly according to claim 7, wherein the apertured members are shaped as circular discs (14, 17) each having an eccentric pilot hole (20).
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9. Method of the use of a mould assembly according to one of more of the claims 1-8, wherein the second mould part (4) is rotated by means of the hinge mechanism (6) from the first open position to the second partially closed position, and then displaced by means of the guide rods (8) from the second partially closed position to
30 the third position, in which the two mould parts (2, 4) meet.

10. Method according to claim 9, wherein the second mould part (4) subsequently is displaced by means of the guide rods (8) from the third closed position to the second partially closed position.
- 5 11. Method according to claim 10, wherein the guide rods (8) are operated such that the second mould part (4) is moved from the third closed position locally, eg at one end thereof, whereafter the remaining part of the second mould part (4) is moved from the third position.